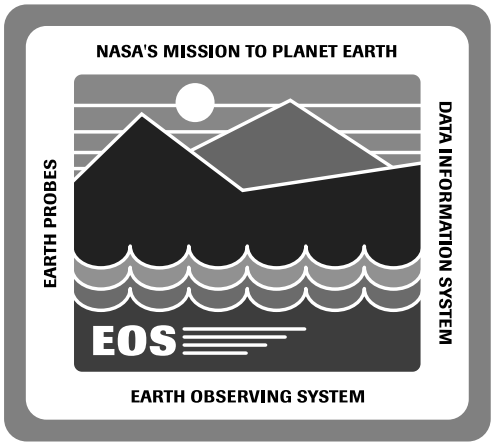
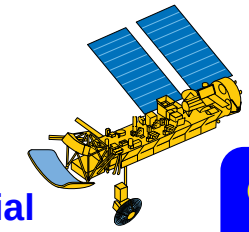


Introduction

Marsh Caplan

System Design Review - 27 June 1994

EOSDIS



Essential remotely sensed and in situ data

Observation Programs

- Polar platforms
- Earth probes
- Other sources

The vital link between scientists and data

Information Systems

Comprehensive data and information systems

Growing scientific understanding of earth system processes and trends

Research Programs

- Multidisciplinary and interdisciplinary studies
- Integrated conceptual and predictive models

EOSDIS
A Complete Research Information System

Integrate and simplify science community interactions with data, mission operations and other scientists from their home laboratories

Respond to science community needs and economically evolve as industry needs and technologies change

Increase investigator productivity and accelerate near term scientific research

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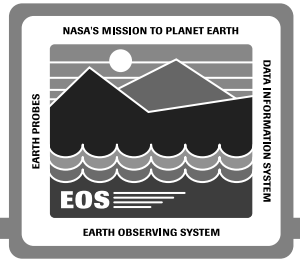
SDR Objectives



Demonstrate "high level" design which:

- **satisfies baseline requirements**
- **is scalable**
- **is evolvable**
- **is affordable**

Establish a Program Plan which is achievable

Ensure requirements meet needs of community

Identify any necessary changes

Demonstrate sufficient progress and system definition to proceed towards PDR

Agenda

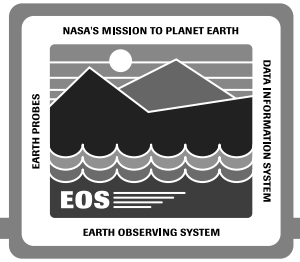
June 27	Plenary Session	Presenting
1:00 p.m.	- ESDIS Introduction	J. Dalton
2:00 p.m.	- ECS Introduction	M. Caplan
2:30 p.m.	- Science	B. Curran
3:00 p.m.	- Break	
3:15 p.m.	- System Overview	J. Guzek
4:00 p.m.	- SDPS Overview	M. Elkington
5:00 p.m.	- CSMS Overview	E. Lerner
5:30 p.m.	- Adjourn	

June 28	Plenary Session	Presenting
8:00 a.m.	- FOS Overview	C. Moore
8:30 a.m.	- External I/Fs	P. Lyons
9:30 a.m.	- Projected System Access & Utilization	P. Thome

10:45 a.m. to 6:20 p.m. SDPS Splinter Session FOS Splinter Session

(Concurrent Sessions)

Agenda
(Continued)

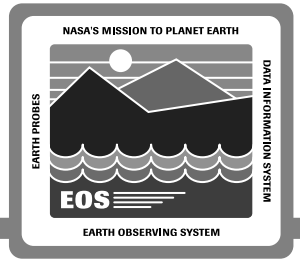


June 29

8:00 a.m. to 12:40 p.m. (Concurrent Sessions)	SDPS Splinter Session	FOS Prototyping Results Review
	CSMS Splinter Session	FOS Prototyping Results Review

	Plenary Session	Presenting
1:25 p.m.	- Version 0	M. Abernathy
1:50 p.m.	- Project I&T	J. Gainsborough
2:20 p.m.	- ECS I&T	G. Scott
2:50 p.m.	- Break	
3:05 p.m.	- M&O	S. Dunn
3:45 p.m.	- Risk Management	G. Percivall
4:15 p.m.	- Release Planning	R. Barbiere
5:15 p.m.	- Summary/Closing	J. Dalton
6:00 p.m.	- Executive Session	

What We Heard At SRR



Need broader science community involvement

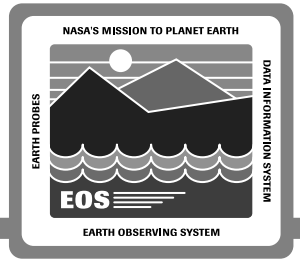
Need to expand and incorporate evolutionary concepts

Need to include external prototyping and/or alternative approaches

Current requirements have preconceived/embedded design

Design is too centralized

Overview of Activities Since SRR



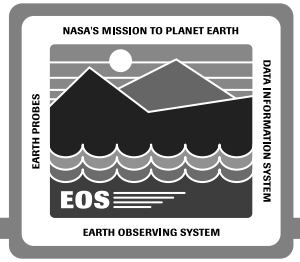
December Progress Review demonstrated conceptual changes in architecture

- **Review for NASA HQ, EOSDIS Science Advisory Panel and NRC Panel**
- **Assessed as success by Reviewers**

Key accomplishments since December Review:

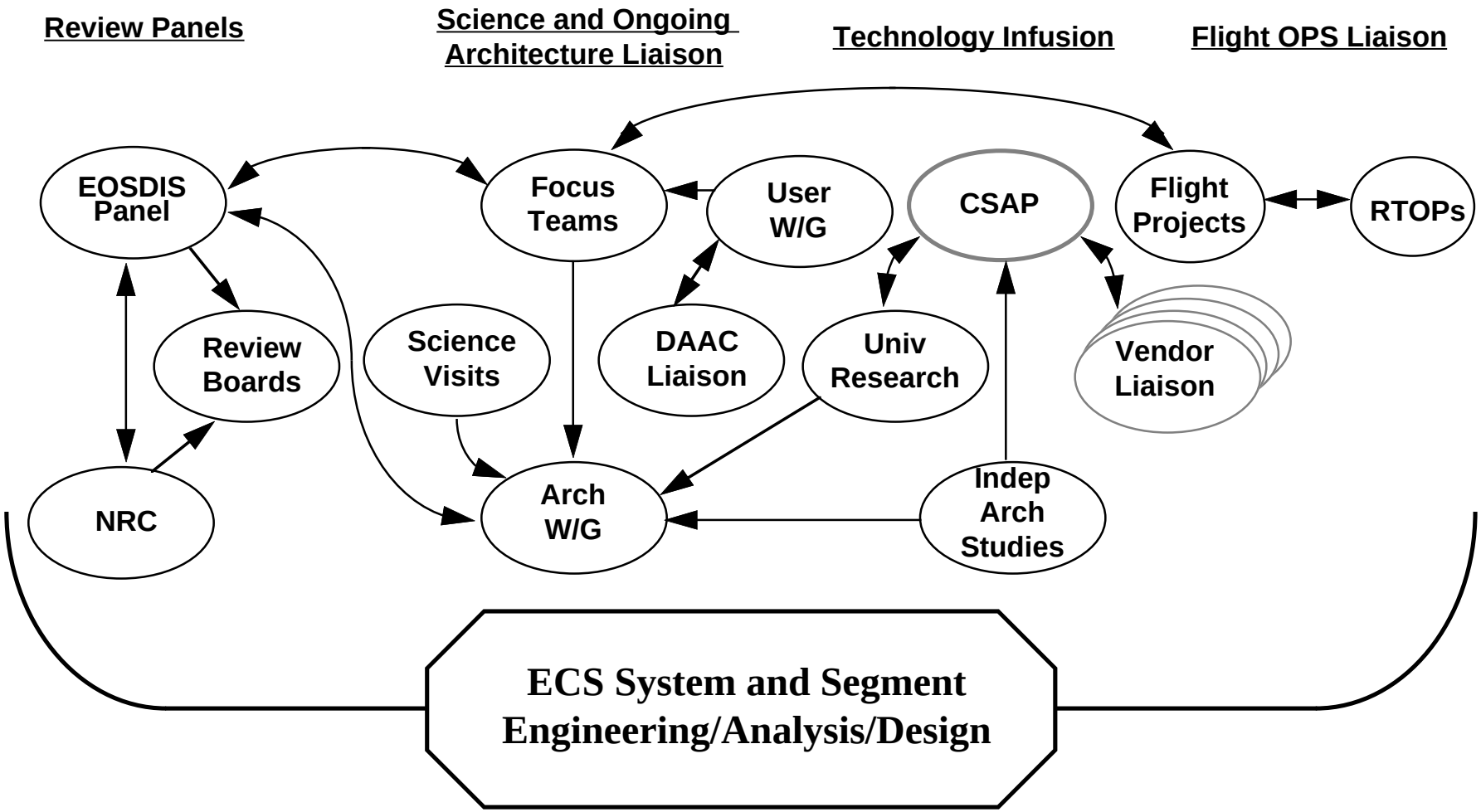
- **Established services oriented open logically distributed evolvable architecture**
- **Design progress with community (architecture WG) involvement**
- **Established modified, lower risk release plan that satisfies science, mission and launch support requirements**

Overview of Activities Since SRR (Continued)

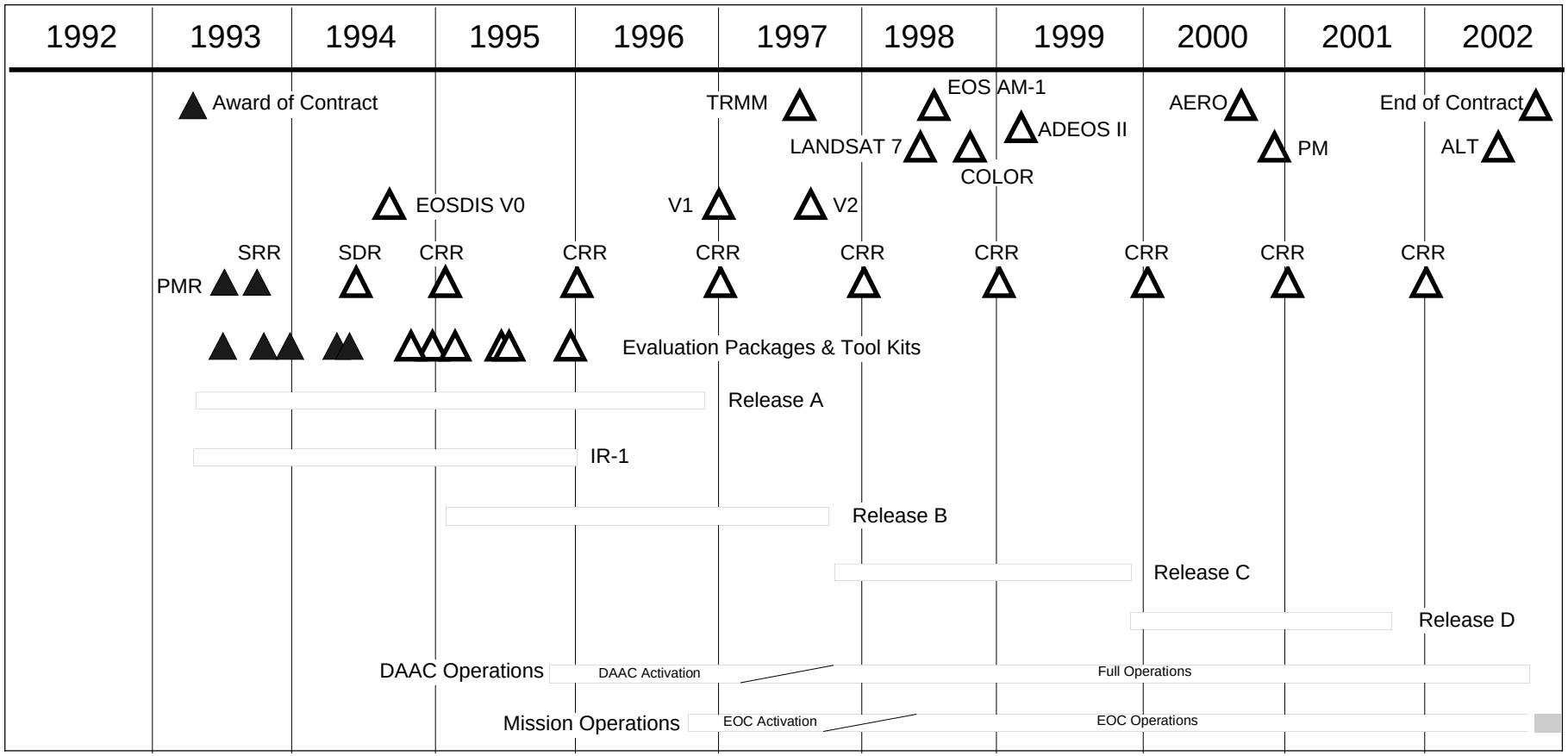


- **Third evaluation package implemented and deployed for user feedback**
- **Algorithm development tool kit defined and initial version(s) delivered**
- **Key external interface requirements defined**
- **Version 0 analysis proceeding well**
- **Independent architecture studies initiated**
- **DAACs staffed with liaison support**
- **Completion of SRR work activities**

Change Influence



ECS Program Schedule



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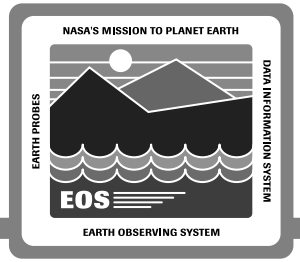
ECS Scheduling Operations

Looking Ahead
Areas Where Community Can Help



Data dependencies and contingencies

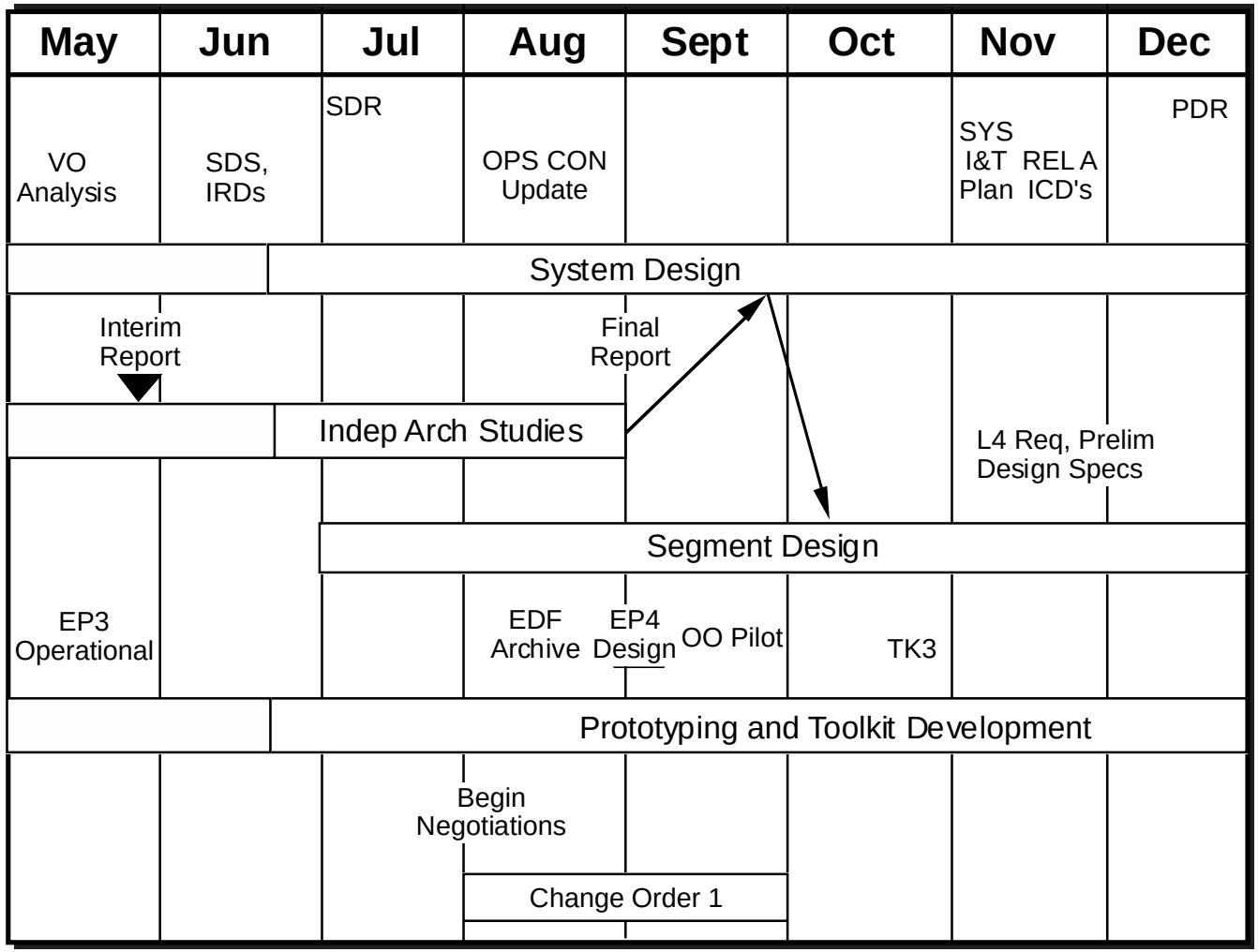
Reprocessing requirements (how much, who, when)

Algorithm Ingest (peer review)

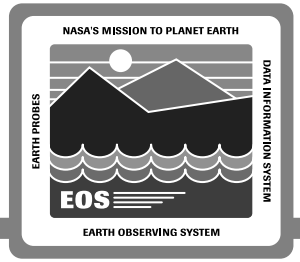
Improved characterization of future pull side users

Tall pole products and algorithms

Road to PDR


May
Jun
Jul
Aug
Sept
Oct
Nov
Dec
VO Analysis
SDS, IRDs
SDR
OPS CON Update
SYS I&T Plan
REL A ICD's
PDR
System Design
Interim Report
Final Report
Indep Arch Studies
L4 Req, Prelim Design Specs
Segment Design
EP3 Operational
EDF Archive
EP4 Design
OO Pilot
TK3
Prototyping and Toolkit Development
Begin Negotiations
Change Order 1

Independent Architecture Studies



Three teams awarded subcontracts in late February 1994 for 6 month studies

1) **George Mason University: U-New-Hampshire, U-Delaware, and the Center for Ocean-Land Atmosphere Studies;**
2) **UC-Berkeley: UCLA, UC-San Diego, UC-Santa Barbara, the San Diego Supercomputer Center, and the Scripps Institution of Oceanography;**
3) **U-North Dakota: North Dakota State University, U-Nebraska at Lincoln, and the U-North Carolina at Wilmington.**

Preliminary Results - Highlights

- **Identification of additional user scenarios (including non-science community)**
- **Concepts to mitigate "Pull" load**
- **Independent confirmation of aspects of ECS SDR architecture**
- **Plan to focus remaining work on further development of unique architectural concepts**